

Flexible RF cable

RG_58_C/U Item: 22510015

Description

RG: RG type RF cables

RG58, 50 Ohm, 1 GHz, 85°C, Ø4.95 mm, PVC jacket



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Tin plated	Strand-19	0.9 mm
Dielectric	PE (Polyethylene)		2.95 mm
Outer conductor	Copper, Tin plated	Braid, 96%	3.6 mm
Jacket	PVC II (low migration)	RAL 9005 - bk	4.95 mm +/- 0.15

Print: HUBER+SUHNER RG 58 C/U 50 Ohm (production order number)

Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	1 GHz
Capacitance	101 pF/m
Velocity of signal propagation	66 %
Signal delay	5.03 ns/m
Screening effectiveness	≥ 38 dB (up to 1 GHz)
Operating voltage	≤ 2.5 kV _{rms} (at sea level)
Test voltage	5 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight	3.7 kg/100 m
Min. bending radius	static 25 mm 50 mm

Environmental Data

Temperature range	-25 °C ... +85 °C
Installation temperature	-20 °C... +60 °C
Halogen free	No
2011/65/EU (RoHS - including 2015/863 and 2017/2102)	compliant
1907/2006/EC (REACH)	compliant

Additional Information

MIL reference: M17/183-00001 (former reference: M17/28-RG058)

Remarks

(For details refer to the HUBER+SUHNER RF CABLES GENERAL CATALOGUE or contact your nearest HUBER+SUHNER partner)

Suitable Connectors

Cable group	U7 3 mm / 50 Ohm
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Matrix typical Attenuation [formula: $(a \cdot f^{0.5} + b \cdot f)$] and maximum Power CW [formula: $(p/f^{0.5})$]

Coefficients:

a = 0.3455

b = 0.2373

 $f_{\max} = 1$

P at 1GHz = 105

Frequency	Nom. attenuation	Nom. attenuation	Max. CW power
(GHz)	(dB / m)	(dB / ft)	(W)
	sea level 25° C ambient temperature	sea level 25° C ambient temperature	sea level 40° C ambient temperature
0,05	0,09	0,027	470
0,1	0,13	0,041	332
0,15	0,17	0,052	271
0,2	0,2	0,062	235
0,25	0,23	0,071	210
0,3	0,26	0,079	192
0,35	0,29	0,088	177
0,4	0,31	0,096	166
0,45	0,34	0,103	157
0,5	0,36	0,111	148
0,55	0,39	0,118	142
0,6	0,41	0,125	136
0,65	0,43	0,132	130
0,7	0,46	0,139	125
0,75	0,48	0,145	121
0,8	0,5	0,152	117
0,85	0,52	0,159	114
0,9	0,54	0,165	111
0,95	0,56	0,171	108
1,0	0,58	0,178	105